Reply to Office action of August 30, 2007

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The Office Action summary indicates that claims 26, 27, and 29-50 are pending in this

Claim 37 in this case was cancelled by the amendment filed on August 30, 2004 and

rewritten as independent claim 50 to include all of the limitations of the rejected parent claims in.

There is no claim 37 pending in this case. Thus, claims 26, 27, 29-36 and 38-50 are pending in

this case.

case.

This amendment cancels claims 47 and 48 from this case.

Claim Rejections 35 U.S.C. § 102

Claims 25, 27, 40, 42, and 46-49 are rejected under 35 U.S.C. 102(b) as being anticipated

by Hoopman.

This rejection is respectfully traversed.

It is noted that claim 25 has been cancelled from this case, and the arguments below are

based on the assumption that the Examiner intended the rejection to apply to claim 26.

In order to be a proper rejection under 35 U.S.C. 102(b), the prior art reference must

show each and every feature of the invention. Hoopman clearly fails to do this.

Hoopman shows a method and apparatus for knurling a workpiece. In Hoopman, a

rotating knurl wheel 12 is mounted on the end of a tool holder 10, and the knurl wheel applies

various knurl patterns onto a workpiece. The knurl wheel 12 is shown in detail in figures 6-11,

14, 16. 16. and 19. The knurl wheel 12 is mounted on the end of the tool holder 10 by a screw

72, and the knurl wheel rotates about the axis C that is coincident with the longitudinal axis of

the screw col. 9, lines 35, 36. In use, engagement of the knurl wheel 12 against the surface 12 of the rotating workpiece causes rotation of the knurl wheel.

Hoopman does not show each and every feature of applicant's claims. Applicant's claims are directed to a <u>turning process</u> in which a <u>non-rotating tool</u> is brought into contact with a rotating workpiece to remove metal from the workpiece. Hoopman discloses a <u>knurling process</u> in which a <u>rotating wheel</u> is brought into contact with the surface of a workpiece to impart a knurled pattern to the surface of the workpiece. Thus, the processes and the tools used to carry out the processes in Hoopman are not the same as defined in applicant's claims.

Claim 42 and 44 specifically recite a control system for a <u>hard turning process</u> for removing metal from a workpiece by a <u>non-rotating tool</u> in which the control system alters the <u>depth of cut</u> produced by the tool. Hoopman does not show a hard turning process, and Hoopman does not show the use of a non-rotating tool. Thus, the rejection of the claims as anticipated by Hoopman under 35 U.S.C. 102(b) is untenable, and should be withdrawn.

Claim 46 recites a <u>turning process</u> for producing a finished surface on the surface of a component using a <u>non-rotating tool</u> including the steps of engaging the surface of the component with the tip of the <u>non-rotating tool</u>, increasing the depth of cut taken by the tool at intervals to create a plurality of depressions in the surface of the component, and advancing the tool in the direction of the component axis by no more than the thickness of its cutting tip during each revoluation of the component, so that the surface of the component, except for the depressions, is a smooth surface. Hoopman does not show a turning process, and Hoopman does not show the other features of the invention as claimed. Thus, the rejection of the claims as anticipated by Hoopman under 35 U.S.C. 102(b) is untenable, and should be withdrawn.

Claims 49 which depends on claim 46 contains the same limitations of claim 46, and as a result, the rejection of this claim as anticipated by Hoopman under 35 U.S.C. 102(b) is untenable, and should be withdrawn.

Claim Rejections 35 U.S.C. § 103

Claims 29-39, 41, 43, 45 and 50 are rejected under 35 U.S.C. 103 as being unpatentable over Hoopman.

This rejection is respectfully traversed.

It is noted that claim 37 has been previously cancelled from this case.

The Examiner relies on Hoopman's at column 10, lines 57-66 to disclose the use of computer programs for carrying out processes for performing the limitations set forth in the claims for the basis of the rejection.

The Examiner's position is faulty since Hoopman does not disclose the limitations set forth in the rejected claims. Hoopman does not disclose a process for turning; Hoopman discloses a process for knurling. Hoopman does not disclose a process for engaging a workpiece with a non-rotating tool; Hoopman discloses a rotating tool. Hoopman does not disclose altering or increasing the depth of cut made by a non-rotating tool; Hoopman discloses a constant depth of cut made by a rotating tool.

The steps listed above are clearly recited in applicant's independent claims 41 and 50, and are not present in Hoopman. Further, it would not be obvious to modify the process of Hoopman to produce a process having the steps claimed by applicant since the Hoopman process is directed to knurling, and applicant's process is directed to turning. For these reasons the rejection of claims 41 and 50 as unpatentable over Hoopman is believed to be untenable, and

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should be withdrawn.

The remaining claims rejected as unpatentable over Hoopman under 35 U.S.C. 103 are all

dependent on claim 46. Claim 46 likewise contains the limitations recited above that distinguish

claims 41 and 50 over Hoopman. For the same reasons as those advance above, the rejection of

claims 29-36, 38, 41, 43, 45 and 50 as unpatentable over Hoopman is believed to be untenable.

and should be withdrawn.

The remaining prior art references cited in this case has been reviewed with interest, but

taken singly or in combination with Hoopman, do not appear to show, teach or render obvious

applicant's invention as claimed.

Conclusion

For the foregoing reasons it is believed that this Amendment places the claims now

appearing in this case in condition for allowance, and an early notice to such effect is

respectfully solicited.

In the event that the Examiner does not agree that the claims are now in condition for

allowance, he is courteously invited to contact the undersigned at the number given below in

order to discuss any changes which the Examiner believes would lead to an allowance of the

claims.

It is believed that no additional fees are necessitated by the entry of this Amendment.

However, if any additional fees are necessitated by the entry of this amendment, authorization is

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hereby given to charge such fees to applicant's Deposit Account No 50-0852. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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